### 大学等等 海绵 UNITED STATES PATENT AND TRADEMARK OFFICE ORIGINALLY FILED Patent application of. Inventor(s) JUN 1 0 2002 RECEIVED JUN 1 2 2002 Technology Center 2600 Title of invention is being transmitted herewith the specification of OR In re application of: LEE, Kujin; KWEON, In So; KIM, Howon; KIM, Application No.: 10 / 071,915 Group No.: 2612 Filed: 2/08/2002 METHOD AND APPARATUS FOR OMNI-DIRECTIONAL IMAGE AND 3-DIMENSIONAL DATA ACQUISITION WITH DATA ANNOTATION AND DYNAMIC RANGE EXTENSION METHOD OF COMMISSION OF PATENTS Washington, D.C. 20231 INFORMATION DISCLOSURE STATEMENT

#### CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\* (When using Express Mail the Express Mail label number is mandatory; Express Mail certification is optional.) I hereby certify that, on the date shown below, this correspondence is being: MAILING deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 37 C.F.R. § 1.10\* 37 C.F.R. § 1.8(a) as "Express Mail Post Office to Addressee" with sufficient postage as first class mail. (mandatory.) Mailing Label No. TRANSMISSION ☐ transmitted by facsimile to the Patent and Trademark Office. Signature Date: \_5.31・0を

(type or print name of person certifying)

\*WARNING: Each paper or fee filed by Express Mail must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Information Disclosure Statement [6-1]—page 1 of \_\_\_\_\_

NOTE: "An information disclosure statement shall be considered by the Office if filed by the applicant:

- (1) Within three months of the filing date of a national application;
- (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or
- (3) Before the mailing date of a first Office action on the ments, whichever event occurs last." 37 C.F.R. § 1.97(b).
- NOTE: "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).
- NOTE: The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13 -25 at 17.

WARNING: "No information disclosure statement may be filed in a provisional application." 37 C.F.R. § 1.51(b).

#### List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections and number pages consecutively)

١.	X	Preliminary Statements					
2.	X	FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)					
3.		Statement as to Information Not Found in Patents or Publications					
4.		Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted					
5.		Cumulative Patents or Publications					
6.	X	Copies of Listed Information Items Accompanying This Statement					
<b>7.</b>		Concise Explanation of Non-English Language Listed Information Items					
		7A.   EPO Search Report					
		7B.					
8.		Translation(s) of Non-English Language Documents					
9.	X	Concise Explanation of English Language Listed Information Items (Optional)					
10.	X	Identification of Person(s) Making This Information Disclosure Statement					

(complete the following, if appropriate)

**Sections** 

NOTE: "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

, respectively, have been continued on ADDED PAGE(S).

Section 1. Preliminary statements

Applicants submit herewith patents, publications of this application, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

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Name of Patentee or Applicant

of Cited Document

McCutchen

Natwa

Nayar

Complete if Known

Application Number 10/071,915

Filing Date February 8, 2002

First Named Inventor LEE, Kujin

2612

STATEMENT BY APPLICANT
(use as many sheets as necessary)

INFORMATION DISCLOSURE

Sheet 1 of 2

U.S. Patent Document

(if known)

Number

US- 5,023,725

US-5,745,305

US- 5,760,826

Examiner Name
Attorney Docket Number 1772-4

Date of Publication of

Cited Document

**U.S. PATENT DOCUMENTS** 

Group Art Unit

MM-DD-YYYY Figures Appear
6-11-1991
4-28-1998
6-02-1998

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

2 Sheet of

Complete if Known				
Application Number	10/071,915			
Filing Date	February 8, 2002			
First Named Inventor	LEE, Kujin			
Group Art Unit	2612			
Examiner Name				
Attorney Docket Number	1772-4			

xaminer nitials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2	
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Date

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Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Examiner

Signature

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



## Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. 1.98(a)(2) requires that any information disclosure statement filed under § 1.97 shall include: "A legible copy of: (1) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed; and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included . . . "

NOTE: The wording in § 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

(complete the following, if applicable)

Exception(s)	to above:
0	Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
	Cumulative patents or publications identified in Section 5.

# Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)

"Applicants may, if they wish, provide a concise explanation of why English-language information is being submitted and how it is understood to be relevant. Concise explanations are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability." Notice of April 20, 1992 (1138 O.G. 37-41, 38).

U.S. Patent No. 5,023,725, issued on June 11, 1991 to McCutchen, describes a method to ever a wider viewing angle by a plurality of images which are obtained as a plurality of cameras each of which covers a different viewing angle.

U.S. Patent No. 5,745,305, issued on April 28, 1998 to Nalwa, teaches a method to cover a wider viewing angle by a plurality of images reflected from a pyramid shaped element to a common virtual optical center.

U.S. Patent No. 5,760,826, issued on June 2, 1998 to Nayar, describes a method to cover about hemispheric viewing angle using a camera with fisheye lens.

Website (<a href="http://www.e-pan.com/index.html">http://www.e-pan.com/index.html</a>) describes a method to produce a single image as by connecting a plurality of images which are obtained as a line-scan camera rotates.

Website (http://www.nearfield.com/dan/photo/wide/sphere/sphere2/index.htm) teaches a method to cover a scene in all possible viewing angles simultaneously, and produce 3D spherical viewing image.

#### Identification of Person(s) Making This Information Section 10. **Disclosure Statement**



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